

**CITY OF FIREBAUGH  
HUD TANK PROJECT  
INITIAL ENVIRONMENTAL STUDY**

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## EXECUTIVE SUMMARY

This document is an analysis of the potential environmental impacts that could be caused by the replacement of an existing 750,000-gallon HUD (water) tank, 3.0 MGD booster pump station and the transmission line from the tank site to the north side of the Delta-Mendota Canal along Washoe Avenue. The major portions/equipment of the project include:

- Demolition/abandoning/disposal of the existing facilities
- Installing temporary pump station
- 750,000 gal water storage tank
- 3.0 MGD pump station in a concrete masonry building
- Standby generator
- Electrical and controls with SCADA integration
- Site piping and valving
- Electromagnetic flowmeters
- Site fencing and gates
- Site lighting
- 12-inch transmission line from HUD tank to North side of DMC
- Pipe crossings at Washoe Avenue and Outside Canal

## 1.0 INTRODUCTION

### 1.1 What is This Document?

The following document is an analysis of potential environmental impacts of the project entitled "HUD Tank Project" being proposed in the City of Firebaugh. A detailed project description is found under Section 1.3 (Project Description).

The California Environmental Quality Act (CEQA) requires public agencies to evaluate the potential environmental effects of development projects and actions that may impact the environment. The installation and construction of improvements associated with Firebaugh's water system is considered to be a "project" under CEQA and must be evaluated for its environmental impacts.

The first step of environmental review is to determine whether a project is exempt from further review. CEQA contains a list of projects and actions normally considered to be exempt. The act of upgrading various features of the water system (particularly given that it may have some growth-inducing impacts) is not exempt from review. The next step is to prepare an Initial Environmental Study (IES) (which is this document). The IES is an initial review of the project and its potential effects. The IES includes:

- A profile of existing conditions on the project site and vicinity.
- A checklist of potential environmental effects of the project. This checklist helps the agency focus its examination of environmental issues.
- A discussion of the environmental effects contained on the checklist.
- A list of possible measures (mitigation measures) that can be employed to reduce or eliminate environmental effects resulting from the project.

The purpose of the IES is to determine the magnitude of potential environmental impacts of the project. The IES will make one of three determinations regarding the project:

- **The project will not have a significant impact on the environment.** A Negative Declaration is prepared to adopt the findings of the study.
- **The project could have a significant impact on the environment,** however mitigation measures have been devised that will minimize those potential impacts to a level that is considered "less than significant". A "Mitigated Negative Declaration" is prepared to adopt the findings of the study.
- **The project will have a significant impact on the environment** and an Environmental Impact Report (EIR) must be prepared. An EIR is an in-depth discussion of the project and its impacts. Mitigation measures that can reduce the magnitude of the impacts should also be discussed. The EIR must also examine alternatives to the project that may or may not reduce environmental impacts. These alternatives could include an alternative site or a different way to design the project. The EIR must also discuss "cumulative impacts" which are impacts that will occur when the project is considered along with other development in the area or the region that may be occurring in the same time frame.

Within an EIR, impacts that cannot be reduced to a level that is "less than significant" must be acknowledged. When considering these impacts the decision-making body (in this case, the City Council) must consider and adopt a "Statement of Overriding Considerations" - a statement

contained in a resolution that finds that the benefits of the project outweigh its negative environmental effects.

Environmental analysis must be conducted before the decision-making body can take action on the project itself - in this case, approving and financing the HUD tank replacement and other associated improvements, such as replacing a segment of an existing water line from the HUD Tank to the east side of the Delta-Mendota Canal.

### Public Review

CEQA requires the environmental analysis to be made available for public review. This allows members of the public, individuals, property owners and potentially affected public agencies to review the findings of the study. The review period for this Initial Environmental Study is 20 days. Individuals and agencies may submit comments on the study during the public review period. These comments must be considered by City of Firebaugh, which must then prepare written responses to the comments.

The IES must be considered by the City Council in a public hearing. Any person may speak on the environmental study at the public hearing and any comments must be considered by the City Council. If, after taking testimony from the public, considering written comments submitted during the public review period, and considering the environmental study itself, the City Council feels that the findings of the study are correct, they may then adopt the findings of the study. If however, the City Council feels the study does not adequately analyze and document the project, it may require additional study or preparation of a full Environmental Impact Report.

### What is a "Significant Impact"

The word "significant" is a subjective term, however, CEQA contains a list of impacts that are normally considered to be "significant". Impacts most commonly found to be significant for development projects in valley communities include:

- Loss of farmland
- Impacts to air quality
- Loss of endangered plant and animal species
- Impacts on infrastructure - local water or sewer systems
- Groundwater
- Loss of cultural resources

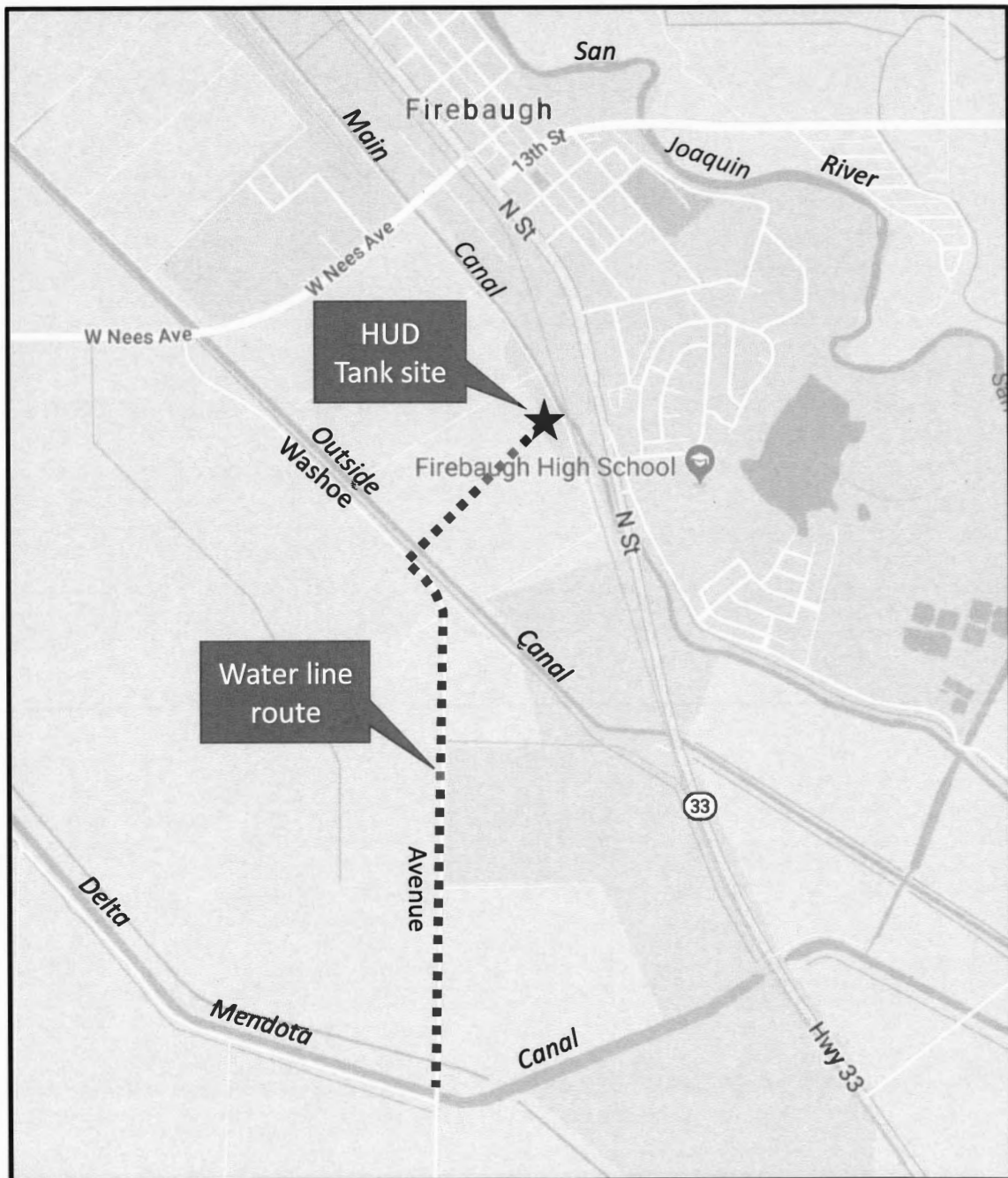
This list is not all-inclusive - impacts will vary depending on the nature of a specific project, its site and surroundings. Further, if an impact was acknowledged as significant in a previous EIR, preparation of a new EIR is not required.

## **1.2 Location**

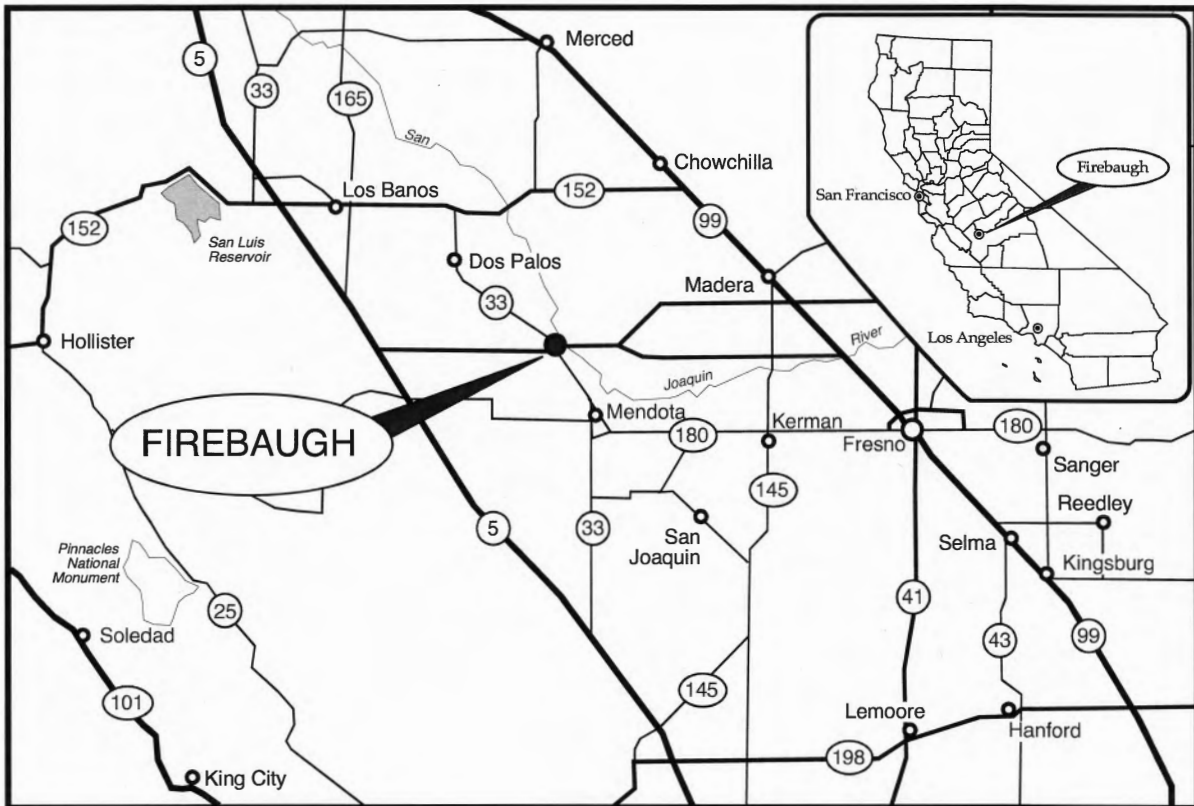
The proposed HUD Tank Project, the "project", is generally located on the south side of the City of Firebaugh, in Fresno County. More specifically, the HUD Tank project area is situated west of State Highway 33 south of West Nees Avenue in Firebaugh (see Map 1: Project Location).

Firebaugh is located on State Highway 33 in western Fresno County, 40 miles west of the city of Fresno. It is situated just east of State Highway 33, about 18 miles east of Interstate 5. The nearest city to Firebaugh is Mendota, about 10 miles to the southeast (see Map 2: Regional Location).

Map 1: Project Location



Map 2: Regional Location



The proposed HUD Tank site is located in the southeast quarter of Section 33, Township 12 South, Range 14 East (see Map 3: USGS Map).

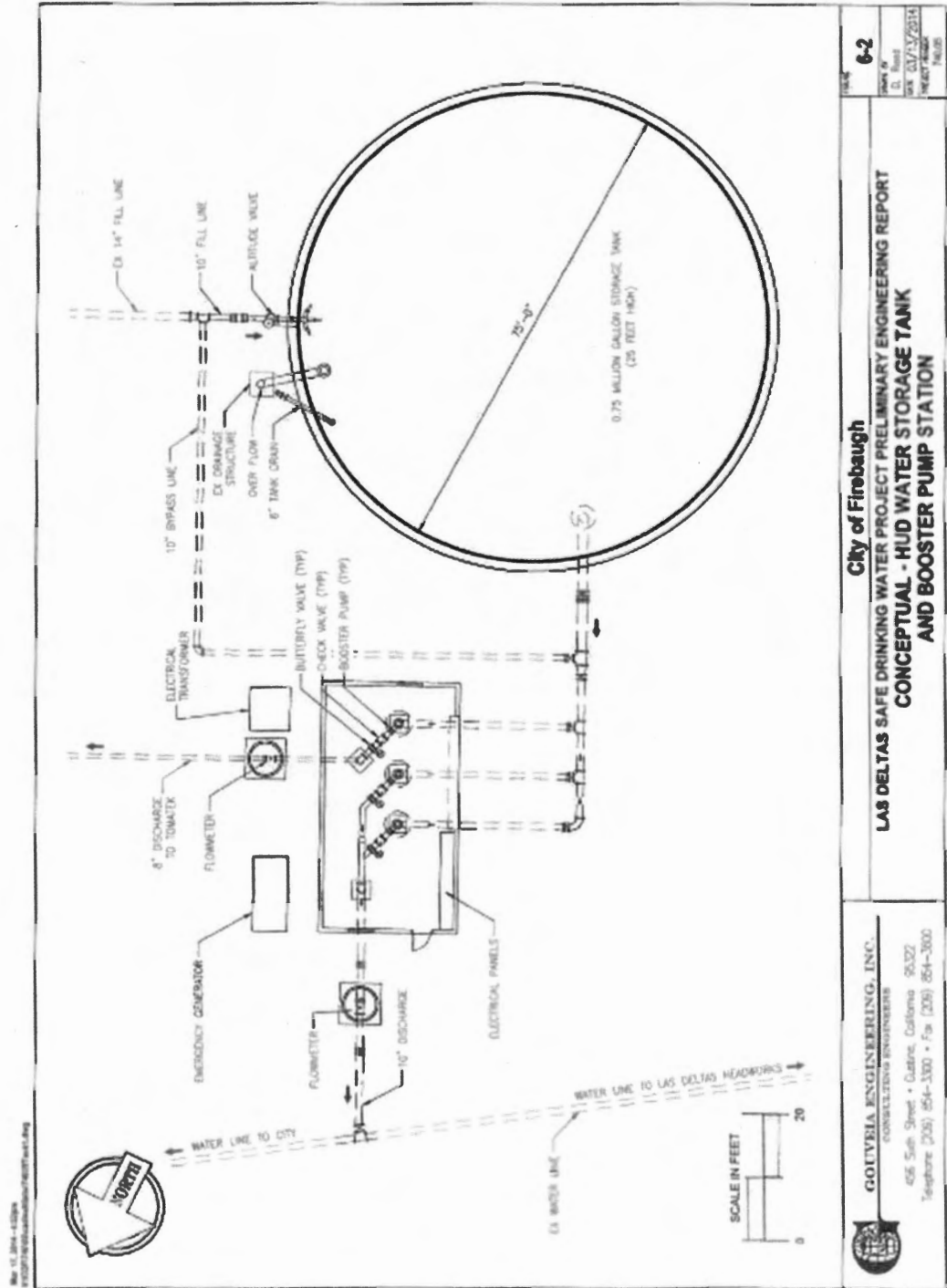
### 1.3 Project Description

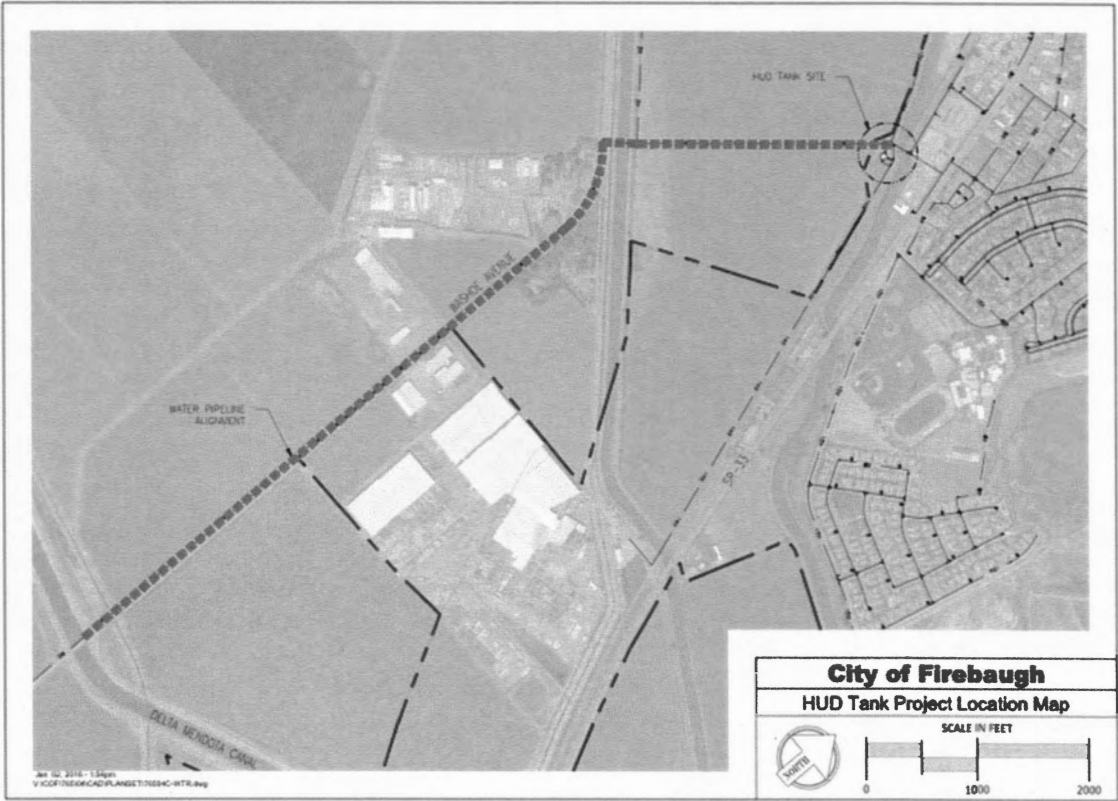
The City of Firebaugh provides potable water to the Las Deltas Mutual Water Company, located south of the Firebaugh city limits. The project is necessary to ensure water quality that meets State Safe Drinking Water Standards, maintains an effective pressure level for fire suppression purposes, and resolves the many leaks in the water line system that delivers water to the Las Deltas community. To meet these objectives, the City of Arvin has proposed the replacement of an existing 750,000 gallon HUD tank, a 3.0 MGD booster pump station (see Map 4: HUD Tank plot plan) and a transmission line from the tank site to the north side of the Delta-Mendota Canal on Washoe Avenue (see Map 5: Pipe Line Alignment). The major features of the project are:

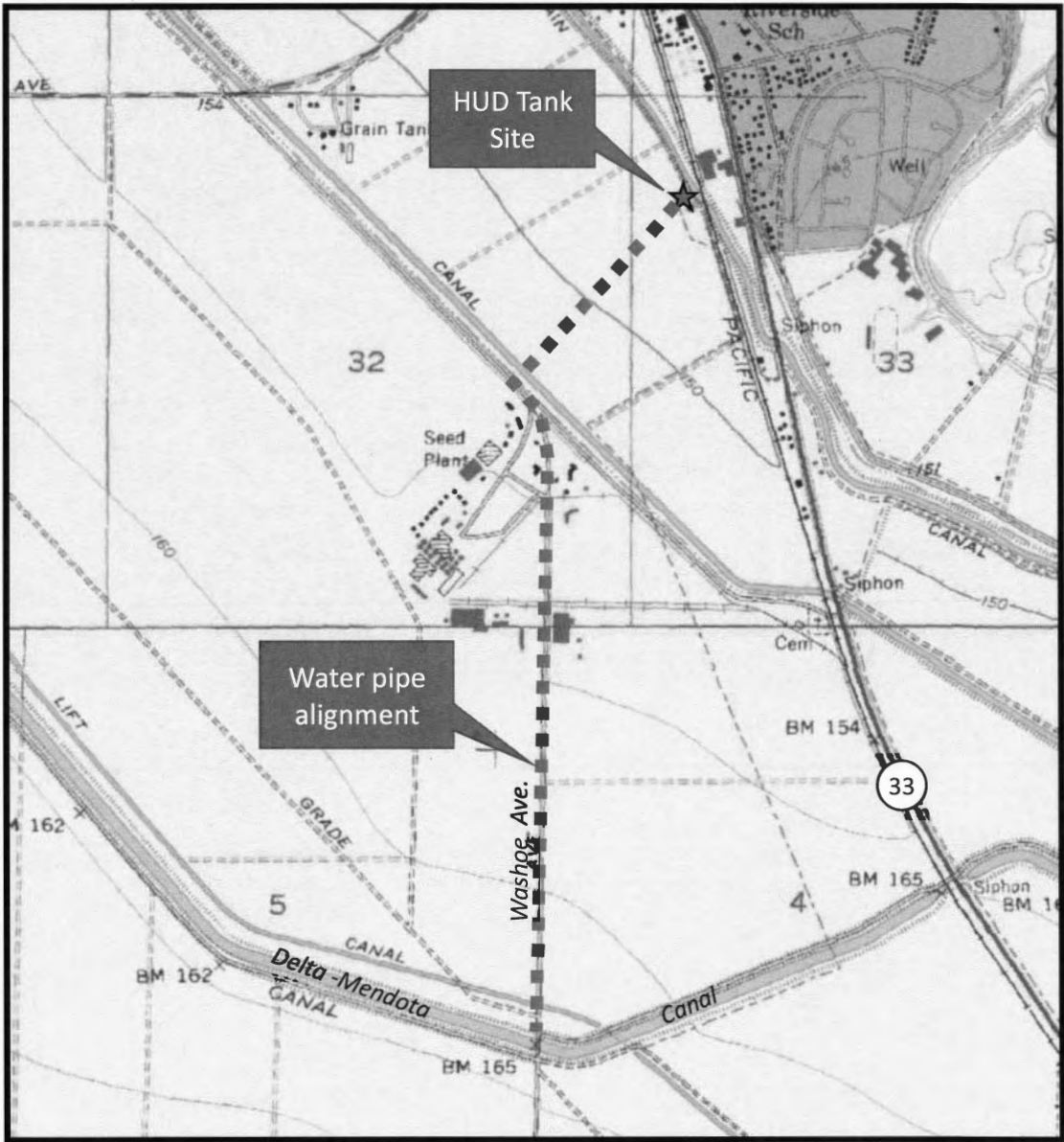
- Demolition/abandoning/disposal of the existing facilities
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- Pipe crossings at Washoe Ave and CCID canal







HUD Tank Project Topography Map



## 1.4 Purpose of Project

This project is necessary to maintain water quality delivered to the Community of Las Deltas within regulatory standards, while providing adequate water supplies to prevent risk to public health and welfare. According to California Water Works Standards, Article 8, Section 64602, "Each distribution system shall be operated in a manner to assure that the operating pressure in the water main at the user service line connection throughout the distribution system is not less than 20 pounds per square inch at all times."

The water distribution system serving the community of Las Deltas is aging and deteriorated. Pipeline leaks, breaks and system down time have caused the system to at times have zero to negative pressures. The water system has also suffered outages periodically. A water pressure logger placed on the system in August 2010 recorded readings below 15 pounds per square inch (psi) on multiple occasions. This demonstrates that the Las Deltas water system is currently not in compliance with the California Water Works Standards, posing a potential health hazard to residents. Further, significant water quantity problems caused by inadequate water delivery capability of the distribution system results in insufficient water to meet the current demand of customers. Consequently, the CDPH has placed Las Deltas as Category "E" on the Drinking Water State Revolving Fund Priority List.

The reasons advanced above point to the need for the Las Deltas water system to be brought in compliance with the California Water Works Standards as soon as possible to protect the health of the residents.

Design criteria are required to guide the planning and design of new water system infrastructure. A set of criteria was developed for the Las Deltas' water system, based on the City of Firebaugh's 2008 Improvement Standards, which are consistent with industry standards (including California Department of Public Health Guidelines such as Title 22, Chapter 16 of the California Water Works Standards). These criteria include water supply, fire flow and pipeline sizing requirements.

Sufficient water system pumping capacity, in conjunction with available storage, must be provided to meet the Maximum Fire Flow concurrent with the Maximum Day Demand or Peak Hour Demand of the City. It should be assumed that the largest pump in the water system is in standby mode.

Many Fire Departments in California use the California Fire Code (CFC) to assist them in establishing minimum fire flows and durations for individual structures. The City of Firebaugh's Improvement Standards require fire flows of 2,000 gpm for low density residential development. This fire flow needs to be available for a minimum of 2 hours. Key standards include:

Distribution pipelines are generally smaller than 12 inches in diameter and are sized based on the criteria described below for average day, maximum day plus fire flow, and peak hour demand conditions.

- Service pressures should be maintained at a minimum of 40 psi. This limit represents design criteria that will protect the integrity of the system and improve system reliability.
- Fire flows are assumed to be concurrent with maximum day demand. Fire flow at fire hydrants should be at least 2,000 gpm with a minimum pressure of 20 psi at the flowing fire hydrant.
- Service pressures should be maintained at a minimum of 40 psi during Peak Hour Demand periods to ensure system reliability.

## 1.4 Benefits of the Project

The project will benefit the community by:

- providing safe drinking water that meets federal and state drinking water standards,
- providing adequate source capacity for drinking and fire suppression that meets the requirements of the State of California, Department of Health Services, and
- assist the City with its efforts to provide affordable water for the residents of Las Deltas by minimizing the cost of water facility operations.

### **1.5 Potential Funding Sources**

The City of Firebaugh is seeking the full cost of the project from potential funding agencies including USDA, Department of Public Health, Community Development Block Grant Program, and the State Revolving Loan Fund. The City is committed to locating and securing any needed funding to close a “financial gap” should one arise, thus ensuring the project will be completed in an efficient and timely manner.

### **1.6 Project Schedule**

The total length of time required for design and construction is expected to take approximately one year.

## **2.0 CITY OF FIREBAUGH**

### **2.1 Overview**

The City of Firebaugh is located along State Highway 33 and the San Joaquin River in the northern portion of western Fresno County. It is approximately 30 miles west of the Fresno-Clovis Metropolitan Area and 18 miles east of Interstate 5, the major surface transportation route between San Francisco and Los Angeles. The main transportation route through the City is Highway 33, which transverses the interior of the San Joaquin Valley, linking Firebaugh with other small communities, including Dos Palos (12 miles northwest) and Mendota (8 miles southeast).

Since incorporation in 1914, the City of Firebaugh has grown to an estimated population of 6,941 in 2010 according to the California Department of Finance. Between 1980-1990, the population of Firebaugh increased by approximately 19% - less than the 25% estimated population increase for Fresno County and California during the same time period. From 1990-2000, however, the City's population increased 29.7%, while Fresno County and California's population increased at a considerably lower rate of 19.8% and 13.8%, respectively. By 2020, Firebaugh is projected to have a population of 9,395 persons. The average household size in Firebaugh in 2000 was 4.01 persons - larger than the average size in Fresno County at 3.09 persons per household.

Since the year 2000, Firebaugh has added 283 dwelling units, which include 227 single family homes, 37 multi-family units and 26 mobile homes.

Agriculture is the mainstay of Firebaugh's economy, with the major crops grown in the area being alfalfa, melons, rice, cotton and various vegetables. The majority of employment within the area is related to agriculture, involving either farm labor or employment in industries processing agricultural products. Toma-Tek is the largest agricultural operation employing upwards of 700 persons during peak processing periods. Major non-agriculture related employers include the Firebaugh School District and the City of Firebaugh. Firebaugh currently suffers a relatively high unemployment rate of 26.5% - which compares to 15.4% for Fresno County as a whole. To a great extent, these high rates are due to the seasonal nature of the agricultural industry. According to the U.S. Census, Firebaugh's median income is at 60% of the State median.

### **3.0 PROJECT SETTING**

The purpose of this section of the Initial Study is to provide a description of the existing environmental conditions in the vicinity of the project site.

#### **3.1 Project Site**

##### **Existing Land Use & Surrounding Lands**

The tank yard is located on city-owned property that rests just east of Highway 33 and south of the 12th Street alignment in Firebaugh (see Exhibit No. 6: Aerial Photo); the pipeline alignment extends from the tank yard through field crop land and then along the Washoe Avenue alignment.

Land in the vicinity of the site is characterized by a variety of existing uses, as follows:

North: row crops

East: Outside Canal and State Highway 33, various industrial buildings

South: row crops

West: row crops

#### **3.2 Land Use Controls**

The HUD Tank site is designated "public/quasi-public" on the Land Use Map of the 2030 Firebaugh General Plan. According to the General Plan, this land use designation is intended for "open space uses that may include riparian woodland, parks, public facilities, and water storage and collection basins."

The site is currently zoned M-1 (light industrial) by the City of Firebaugh. This zone classification is consistent with General Plan's land use designation of "public/quasi public".

##### **Surrounding Lands**

According to the 2030 Firebaugh General Plan's Land Use Map, land to the north, south and east of the site is designated "Open Space"; land to the west is designated "Low Density Residential".

#### **3.3 Traffic and Circulation**

The HUD Tank site currently has access to unpaved driveway that extends from West Nees Avenue, which is designated as a "local" roadway by the Circulation Element.

#### **3.4 Utilities**

##### **Sewer**

The City of Firebaugh provides sewer service to developed properties within its city limits. Firebaugh's sanitary sewer system consists of a network of pipelines, lift stations, and a wastewater treatment plant



that provides secondary treatment. Treated wastewater is percolated and evaporated in 12 acres of ponds located at the city's wastewater treatment plant - located on the southeast edge of the City.

Firebaugh's Wastewater Treatment Plant (WWTP) is designed to accommodate a daily maximum flow of 1.5 million gallons per day (mgd). In recent months the plant has been experiencing an average daily flow of .5 - .7 mgd. Peak flow during the winter is about 1.1 mgd.

#### Water

The City of Firebaugh provides water service to developed properties within its city limits. The existing system consists of a network of 4, 6, 8, 10, 12, and 14-inch distribution lines that connect to 10- and 12-inch mains. The city pumps groundwater from six wells situated along the San Joaquin River. The depth of the wells range from 210-300 feet, with a pumping capacity ranging from 1,000-1,200 gallons per minute (gpm). The system has a peak production capacity of about 6,945 gallons per minute (gpm) or nearly 10 million gallons per day (mgd). The City has approximately 1,400 customers in its system with an annual water usage of 793 million gallons. This annual usage translates to an average usage of 2.17 mgd, with the demand during peak periods reaching 5.4 mgd.

The City filters its water supply through two water treatment plants, with 3 filter tanks operating at each plant. Historically, the water supplied by the City has been of good quality although elevated levels of iron, arsenic and manganese have been observed during peak water-demand periods. One water treatment plant was recently rebuilt and now has the capacity to filter the City's water supply during peak production in order to meet safe drinking water standards for iron and manganese. The City's water system also includes three storage tanks that combine to hold a capacity of 4.35 million gallons of water.

The Las Deltas system is composed of three 30,982-gallon at-grade tanks and a water distribution system made up of 4 to 6 inch lines. the water distribution pipeline are said to be asbestos cement. the system has 107 connections none of which are metered.

#### Storm Drainage

Storm drainage within the community is provided by the City of Firebaugh. The City currently operates three storm drainage basins in the north part of the City. Most storm water in Firebaugh has historically been pumped into Central California Irrigation District canals or allowed to flow by gravity into the San Joaquin River.

#### Gas and Electricity

Pacific Gas and Electric Company provide natural gas and electricity service in the Firebaugh area. The HUD Tank site is connected to PG and E lines.

### 3.5 Geological Hazards

The potential for damage to structures in the Firebaugh area due to geologic/seismic processes is low. Firebaugh is not in an area with known active faults that constitute potential hazards to structures. The closest active faults to Firebaugh include the Ortigalita Fault (approx. 30 miles west), the Paicines, San Andreas, and Calaveras Faults (about 45 miles to the west) Although these fault systems have the

capability of significant damage, the distance is great enough to reduce the prospect of significant damage to a minimal level.

### **3.6 Soils**

According to the Soil Conservation Service (SCS), there are no Class I or Class II soils (soils considered to be prime for agricultural use) in the Firebaugh area. Although there are some Class II soils within Firebaugh's Sphere of Influence, the Department of Soil Conservation (SCS) has stated that none of the Class II soils on the Fresno County side of the San Joaquin River are prime agricultural soils. According to the SCS map for the Firebaugh area, the HUD Tank site and the water line alignment is composed of "Tranquillity" soil.

### **3.7 Flooding**

According to Federal Flood Insurance Rate maps, the HUD Tank site is located within a 100-year floodplain as well as segments of the new water lines where they cross local canals - Delta-Mendota Canal, First Lift Canal and Second Lift Canal. Because all the water lines will be buried under road rights-of-way they will be unaffected by potential floodwaters. The new HUD tank, which will replace the existing tank, and the booster pumps will be located on a site just west of Helm Canal and southeast of West Nees Avenue in Firebaugh. These facilities will be designed to withstand a 100-year floodplain event by either being elevated above the high floodplain flood contour or protecting the facilities with a berm that surrounds the tank site.

### **3.8 Biological Resources**

The HUD Tank site is devoid of vegetation as is most of the proposed pipeline alignment. Garcia and Associates (GANDA) have prepared a biotic study on the project. This Study is attached this report. The findings are contained in this Study (Attachment A).

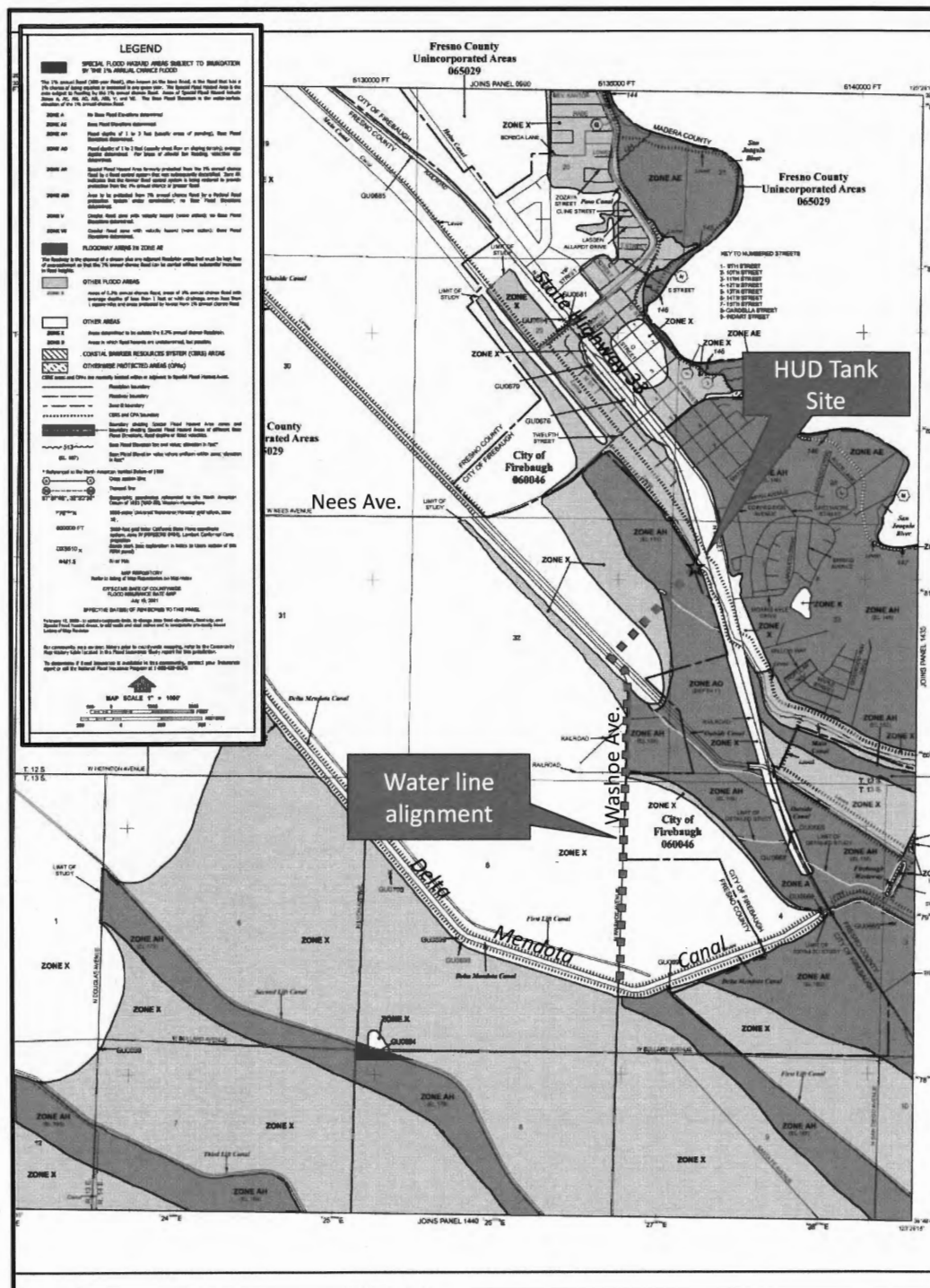
### **3.9 Cultural Resources**

GANDA has prepared a cultural resources report on the project. This Study is attached to this report. There have been previous archaeological record searches in the Firebaugh area. The findings are contained in this Study (Attachment B).

### **4.0 Air Resources**

The project area is located in the San Joaquin Valley Air District. The San Joaquin Valley Unified Air Pollution Control District is designated as a "non-attainment area" for ozone and PM 2.5. Ozone is a product of sunlight interacting with ROGs and NOx while PM 2.5 is dust and particles resulting from agricultural operations, internal combustion engines and manufacturing processes. An air quality emissions report has been prepared for the project. The findings are contained in this Study (Attachment C).

Map 6: FEMA Flood Zone Map



**4.0 DISCUSSION OF POTENTIAL ENVIRONMENTAL IMPACTS**

This section of the Initial Study analyzes potential impacts of the proposed project. For each topic issue a determination of the magnitude of the impact is made (via checklist) and then the impact is analyzed and discussed. Where appropriate, mitigation measures are identified that will reduce or eliminate an impact.

Potentially Significant <u>Impact</u>	Less Than Significant with <u>Mitigation</u>	Less Than Significant <u>Impact</u>	No <u>Impact</u>
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**I. AESTHETICS** -- Would the project:

1. Have a substantial adverse effect on a scenic vista?

☐ ☐ ☒ ☐

**Discussion:** The HUD tank, associated improvements and the new water line will be located on land that is already disturbed. None of these improvements are within the site line of nearby residents or persons traveling on nearby roadways, including State Highway 33. None of the proposed improvements will require any native vegetation to be removed. The existing HUD Tank area will be surrounded by a 6-foot chain-linked fence and will be provided with lighting that will illuminate the small yard that encloses the tank and associated equipment.

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

☐ ☐ ☒ ☐

**Discussion:** There are no significant stands of trees, rock outcroppings, historic buildings or other recognized scenic features within the project area.

3. Substantially degrade the existing visual character or quality of the site and its surroundings?

☐ ☐ ☒ ☐

**Discussion:** The existing visual character of the HUD Tank site and the proposed alignment of the water line is dominated by land that has been disturbed and is free of native vegetation.

The footprint of the HUD Tank site, which encompasses .75 acres, will contain the replacement tank as well as the 3.0 MGD pump station, a standby generator, electrical control panels, site piping and valve, flow meters, site fencing and gates, and lighting.

The site is surrounded by a 6-foot chain-link fence with three strands of barbed wire on top of the fence. This above-ground feature will have a less than significant impact on the visual character of the area because it is not in the view shed of persons traveling through the community or by residents living nearby.

4. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

☐☐☒☐

**Discussion:** The HUD Tank site will be illuminated with lighting mounted on poles. This lighting will not introduce a significant amount of light to the local area. Further, there are no nearby residents whose nighttime views would be adversely impacted.

**II. AGRICULTURE AND FOREST RESOURCES:** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:

1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring

Program of the California Resources  
Agency, to non-agricultural use?

☐ ☐ ☐ ☒

**Discussion:** According to the Farmland Mapping and Monitoring Program of the California Resources Agency, the HUD Tank site has not been mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, but falls within the classification of Urban Built-Up Land. There will be no impact.

2. Conflict with existing zoning for  
agricultural use, or a Williamson Act  
contract?

☐ ☐ ☐ ☒

**Discussion:** The HUD Tank site is zoned M-1 (light industrial). Nearby properties are under agricultural production (row crops). Some nearby parcels are under an agricultural preserve contract but the project will not adversely impact the continuation of these contracts.

3. Conflict with existing zoning for, or cause  
rezoning of, forest land (as defined in Public  
Resources Code section 12220(g)) or timberland  
(as defined in Public Resources Code section  
4526)?

☐ ☐ ☐ ☒

**Discussion:** The tank site is zoned M-1 (light industrial). The site does not contain any timerland and there the project will not have an impact on timerland resources.

4. Result in the loss of forestland or conversion of  
forestland to non-forest use?

☐ ☐ ☐ ☒

**Discussion:** The subject site does not contain trees that would be harvested for commercial lumber.

5. Involve other changes in the existing  
environment, which, due to their  
location or nature, could result in  
conversion of Farmland, to non-

agricultural use or conversion of  
forestland to non-forest use?

☐ ☐ ☐ ☒

**Discussion:** The tank site is located just outside the urbanized area of Firebaugh. Its continued use as a water tank site will not cause any surrounding land to be converted from an agricultural use to a non-agricultural use.

**III. AIR QUALITY** -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

1. Conflict with or obstruct  
implementation of the applicable air  
quality plan?

☐ ☐ ☒ ☐

**Discussion:**

An Air Quality Emissions report has been prepared on the project (see Attachment A). The Report concluded that the project would not have an adverse impact on the air environment, either short-term or long-term.

Emissions generated by this project will generally fall into two categories: short term and long term. Short-term air pollution impacts will be mitigated by on-site dust reducing measures. Short-term air pollution impacts are those, which are generated at construction sites and usually, consist of PM-10 (particulate matter 10 microns or smaller in diameter) as well as emissions from motor vehicles and equipment operating on (and to and from) the site.

During construction, grading activities may result in suspended dust particles, particularly under windy conditions. This short-term potential impact can be mitigated by on-site dust suppression measures. These measures include watering of all graded or excavated material at least twice a day, stopping grading and excavation activities when the wind speed exceeds 20 mph for one hour, watering or covering all material transported off-site, and minimizing the area disturbed by grading and excavation activities. The San Joaquin Valley Unified Air Pollution Control District has jurisdiction over construction site activities, ensuring that dust suppression measures will be implemented. The District's dust control rules are contained in Regulation VIII.

The District's rules also pertain to emissions from pump and construction equipment, primarily consisting of ozone-causing emissions – Reactive Organic Gases (ROG) and



oxides of nitrogen (NO<sub>x</sub>). The project's construction-related emissions will be below the Air District's thresholds for significance - however the District's construction-site standards will apply to this project site. Among others, these standards include rules limiting idling times for vehicles and ensuring that vehicles are properly tuned.

The air quality standards that apply to the San Joaquin Valley are detailed below.

**Table 1: Federal and State Ambient Air Quality Standards –2008**

<u>Pollutant</u>	<u>Averaging Time</u>	<u>California Standards</u> <sup>a</sup>	<u>Federal Standards</u> <sup>b</sup>
		<u>Concentration</u>	<u>Primary</u> <sup>c</sup>
<b>Ozone</b>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	---
	8 Hour	0.07 ppm (137 µg/m <sup>3</sup> )	0.075 ppm (147 µg/m <sup>3</sup> )
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>	24 Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	---
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>	24 Hour	No separate standard	35 µg/m <sup>3</sup>
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>
<b>Carbon Monoxide (CO)</b>	8 Hour	9.0 ppm (10 µg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b> g/m <sup>3</sup>	Annual Arithmetic Mean	0.030 ppm (56 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )
	1 Hour	0.18 ppm (338 µg/m <sup>3</sup> )	---
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	Annual Arithmetic Mean	0.030 ppm (80 µg/m <sup>3</sup> )	---
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )	0.14 ppm (365 µg/m <sup>3</sup> )
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	---
<b>Lead</b>	30 Day Average	1.5 µg/m <sup>3</sup>	---
	Calendar Quarter	---	1.5 µg/m <sup>3</sup>
<b>Visibility Reducing Particles</b>	8 Hour	---	---
<b>Sulfates</b>	24 Hour	25 µg/m <sup>3</sup>	---
<b>Hydrogen Sulfide</b>	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	---
<b>Vinyl Chloride</b>	24 Hour	0.010 ppm (26 µg/m <sup>3</sup> )	---

A California standards for ozone, carbon monoxide, sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles, are values not to be exceeded. All others are not to be equaled or exceeded.

B National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year.

C National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

Long-term air pollution impacts are those that occur from the "operation" of a given use. The project proposes the installation and operation of a pumping station that will serve the HUD Tank. The operation of the motor that will pump water to and from the HUD Tank falls below the District's "threshold for significance" as per the attached air quality modelling information. This engine will be powered by electricity thereby precluding any air emissions that would increase the frequency or severity of the Air District's non-attainment status for ozone or PM 2.5.

1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

☐ ☐ ☒ ☐

**Discussion:** The San Joaquin Valley Unified Air Pollution Control District is designated as a "non-attainment area" for ozone and PM 2.5. Ozone is a product of sunlight interacting with ROG's and NOx, while PM 2.5 is dust and particles resulting from agricultural operations, internal combustion engines and manufacturing processes, among others. The operation of an electrical motor will not result in an increase in the frequency or severity of existing air quality violations, delay their timely attainment, or interfere with the interim emission reductions specified in the Plan.

2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

☐ ☐ ☒ ☐

**Discussion:** The proposed project will not generate significant criteria pollutants for which the region is non-attainment nor will emissions exceed thresholds established by the SJVAPCD for ozone precursors. The implementation of Regulation VIII standards will ensure that the project will not result in an increase in the frequency or severity of

existing air quality violations, particularly dust. Further, the operation of an electrical motor will ensure that new violations for ozone and PM 2.5 are not increased because no direct emissions will result from the operation of the engine.

3. Expose sensitive receptors to substantial pollutant concentrations?

☐ ☐ ☐ ☒

**Discussion:** Receptors include sensitive receptors and worker receptors. Sensitive receptors refer to segments of the population that are most susceptible to poor air quality - children, elderly, and persons with respiratory problems. The operation of an electrical engine to pump water to and from the HUD Tank will not result in any emissions and therefore will not expose sensitive receptors or work receptors to substantial pollutant concentrations.

4. Create objectionable odors affecting a substantial number of people?

☐ ☐ ☐ ☒

**Discussion:** The installation and operation of a new tank, pump and other equipment in the tank yard will not generate any odors.

#### **IV. BIOLOGICAL RESOURCES** -- Would the project:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

☐ ☒ ☐ ☐

#### **Discussion:**

A Biological Assessment (see Attachment A) has been prepared by Garcia and Associates for the City of Firebaugh (City), in support of the HUD Tank Replacement Project (Project). Because the City proposes to utilize federal funds for the Project and

must obtain a federal permit for work that is proposed within federal jurisdictional waters, it must also comply with federal laws.

The purpose of the Project is to improve water quality and the existing water system to provide adequate fire flows (GOUVEIA 2014) while minimizing adverse effects on the environment in the surrounding area.

The proposed Project has the potential to affect several biological resources within the Area of Potential Effect (APE), as detailed in the Biological Assessment, Chapter 2. Biological resources potentially affected by the proposed Project include wetlands that are suitable for one state species of concern wildlife species listed as either threatened or endangered at the federal level, based on the initial review of regional habitat and sensitive species mapping and the U.S. Fish and Wildlife Service (Service) list of candidate, proposed, threatened, or endangered species potentially occurring within the APE.

No federally or state listed plant species have the potential to occur within the APE, and the proposed Project is not expected to affect any listed plant species.

Based on the analysis in the BA, the following federally listed threatened or endangered animal species have the potential to occur within the APE: giant garter snake (*Thamnophis gigas*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and San Joaquin kit fox (*Vulpes macrotis mutica*).

One state-listed species, the Swainson's hawk (*Buteo swainsoni*), has the potential to occur in the APE.

The following two state species of special concern have a moderate potential to occur in the APE: western pond turtle (*Emys marmorata*) and western red bat (*Lasiurus blossevillii*).

The following two bat species tracked by the California Natural Diversity Database (CNDDDB) have a moderate potential to occur in the APE: hoary bat (*Lasiurus cinereus*) and Yuma myotis (*Myotis yumanensis*).

No proposed or designated critical habitat for any species occurs in the APE.

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

☐ ☐ ☒ ☐

**Discussion:**

A Biological Assessment (see Attachment B) has been prepared by Garcia and Associates for the City of Firebaugh (City), in support of the HUD Tank Replacement Project (Project). Because the City proposes to utilize federal funds for the Project and must obtain a federal permit for work that is proposed within federal jurisdictional waters, it must also comply with federal laws.

The purpose of the Project is to improve water quality and the existing water system to provide adequate fire flows (GOUVEIA 2014) while minimizing adverse effects on the environment in the surrounding area.

The proposed Project has the potential to affect several biological resources within the Area of Potential Effect (APE), as detailed in the Biological Assessment, Chapter 2. Biological resources potentially affected by the proposed Project include wetlands that are suitable for one state species of concern wildlife species listed as either threatened or endangered at the federal level, based on the initial review of regional habitat and sensitive species mapping and the U.S. Fish and Wildlife Service (Service) list of candidate, proposed, threatened, or endangered species potentially occurring within the APE.

No proposed or designated critical habitat for any species occurs in the APE.

3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

☐☐☒☐

**Discussion:**

A Biological Assessment (see Attachment B) has been prepared by Garcia and Associates for the City of Firebaugh (City), in support of the HUD Tank Replacement Project (Project). Because the City proposes to utilize federal funds for the Project and must obtain a federal permit for work that is proposed within federal jurisdictional waters, it must also comply with federal laws.

Numerous irrigation canals and drainage ditches traverse the Study Area. During the July 18, 2018 reconnaissance survey, some of these features supported patches of upland vegetation or were concrete lined (Appendix B, photos 5 and 10), and some of these features were inundated and supported patches of emergent wetlands or other hydrophytic plant species. The Delta-Mendota Canal is the largest canal in the Study Area and supports a fringe of ludwigia (*Ludwigia* sp.) along both banks. The Main Canal, along Main Street just northwest of the HUD storage tank facilities, supports a patch of bulrush (*Scirpus* sp) and hydrophytic grasses and forbs along the edges, including willow herb (*Epilobium ciliatum*), Italian ryegrass (*Festuca perennis*), rabbitfoot grass (*Polypogon monspeliensis*), and water speedwell (*Veronica anagallis-aquatica*). A drainage ditch to the west of the HUD tank facilities also supports dense cattails (*Typha latifolia* and *T. angustifolia*).

A broad range of avian, mammalian and herpetofauna (amphibians and reptiles) species utilize emergent wetland habitat as a source for nesting, denning, and overwintering within dense cattails, reeds and along the banks of this vegetation community. Several avian species common for this region of California include red-winged blackbird (*Agelaius phoeniceus*), Brewer's blackbird, song sparrow (*Melospiza melodia*), and marsh wren (*Cistothorus palustris*). Mammalian species include the California vole (*Microtus californicus*), common muskrat (*Ondatra zibethicus*), and Norway rat (*Rattus*

*norvegicus*). Western pond turtle (*Emys marmorata*), Sierran treefrog (*Pseudacris sierra*), valley garter snake (*Thamnophis sirtalis fitchi*), and the introduced bullfrog (*Lithobates catesbeiana*) are common herpetological species that inhabit these areas.

Some of the drainage ditches and irrigation canals, and associated wetlands, in the Study Area are potentially regulated by the Corps as wetlands or other waters of the United States under Section 404 of the Clean Water Act. The extent of federally protected wetlands or waters in the APE is not known at this time. If avoidance of wetlands is not possible, prior to the implementation of the proposed project, a formal wetland delineation shall be conducted in the Project area to determine the extent of jurisdictional wetlands and other waters that may be impacted by the proposed project. Ditches and irrigation canals in the Project area should be considered on a case by case basis to determine their jurisdictional status.

Mitigation measures are as follows:

A. Work within areas defined as waters of the U.S. that includes placement of fill will require a Clean Water Act Section 404 permit from the Corps. All work proposed in jurisdictional waters of the U.S. will be authorized by permits from the Corps. In areas where project activities are temporary in nature, jurisdictional wetland and other waters of the U.S. will be restored to their condition prior to disturbance. In areas where permanent disturbance to jurisdictional waters or wetlands will occur, the City will identify if potential mitigation sites are present within close proximity to the area of disturbance and will construct new or restore degraded wetlands. If waters or wetlands cannot be restored on-site or in the immediate vicinity of the disturbance location, replacement at a nearby off-site location will be provided. The replacement of waters or wetlands will be equivalent to the nature of the habitat lost and will be provided at a suitable ratio to ensure that, at a minimum, there is no net loss of habitat acreage or value. The replacement habitat will be set aside in perpetuity for habitat use. Mitigation ratios to achieve the “no net loss” standard will be determined in consultation with the Corps.

B. The City would ensure that long-term management of all offsite enhancement, restoration, and creation sites occurs. Within three months of the acquisition of any parcel or easement, a draft management plan would be developed in coordination with the Service. The plan should be finalized within six months and implemented immediately following final signoff. If the conservation sites are transferred to a third party for long-

term management, then an endowment with sufficient funds (determined using the PAR system or a PAR-like system) would be established subject to availability of funds, unless otherwise negotiated with the receiving party.

C. All habitats to be restored, enhanced, created and/or preserved outside of the right-of-way, as stated above, would be managed and preserved in perpetuity. The project proponent would ensure there is a perpetual biological conservation easement over all properties used to offset impacts addressed in this Assessment and these lands would be managed according to a Service-approved Long-Term Management Plan. The perpetual conservation easement and Long-Term Management Plan would be submitted to the Service prior to the start of any restoration, enhancement, or creation activities.

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

☐☒☐☐

### **Discussion:**

Agricultural habitats are the dominant habitat type in the APE and include croplands, orchards, and fallow fields (Appendix A, photos 3 and 9). In Firebaugh and the Las Deltas Community, agricultural habitats include irrigated row crops such as alfalfa (*Medicago sativa*), vegetable and fruit crops, field crops, deciduous and evergreen orchards, and vineyards. Cropland agricultural habitats can provide food and cover for wildlife species, but the value of the habitat varies greatly among crop type and agricultural practices. Grain crops provide forage for songbirds, small rodents, and waterfowl at certain times of year. Pastures, alfalfa, and row crops, such as beets and tomatoes, provide foraging opportunities for raptors such as red-tailed hawk (*Buteo jamaicensis*) and Swainson's hawk (*Buteo swainsoni*) because of the frequent flooding, mowing, or harvesting of fields, which make prey readily available. Orchards and vineyards have relatively low value for wildlife because understory vegetation growth that would provide food and cover typically are removed. Species that use orchards and vineyards, such as California ground squirrel (*Otospermophilus beecheyi*), American



crow (*Corvus brachyrhynchos*), Brewer's blackbird (*Euphagus cyanocephalus*), and European starling (*Sturnus vulgaris*), often are considered agricultural pests.

Ruderal/non-native grassland is located in the road shoulders, unpaved access roads, and on the banks and levees of canal/irrigation ditches, and adjacent to the HUD tank facilities (Appendix B, photos 1, 2, and 5). This habitat is limited in size and extent in the Study Area. One of the largest patches of this habitat occurs adjacent to the HUD tank facilities and between Highway 33 and railroad tracks. Vegetation is characterized by ruderal (early colonizing species) and non-native grasses and forbs.

Non-native annual grasses observed in the APE include red brome (*Bromus madritensis* ssp. *rubens*), rip-gut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum* ssp. *leporinum*), and wild oats (*Avena* sp.). Native plant species were uncommon, but patches of salt grass (*Distichlis spicata*) occur south of the HUD tank facility and in the area between Highway 33 and railroad tracks. Common ruderal species such as red-stemmed filaree (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), common groundsel (*Senecio vulgaris*), milk thistle (*Silybum marianum*), and common bindweed (*Convolvulus arvensis*) also occur in this habitat in the Study Area.

Non-native grassland communities can support a biologically diverse set of wildlife species; however, grassland habitat in the APE is limited and is often associated with ruderal plant species, which can reduce its habitat value. Ground and fossorial nesting avian species such as northern harrier (*Circus cyaneus*), ring-necked pheasant (*Phasianus colchicus*), and western meadowlark (*Sturnella neglecta*), utilize this vegetation type for nesting, but many avian species such as the loggerhead shrike (*Lanius ludovicianus*) also use these areas for foraging, and other aspects of their life histories. Breeding loggerhead shrikes are considered California species of special concern; however, the Project Area lacks suitable breeding habitat for this species. Mammalian species that use grasslands for denning and food include San Joaquin kit fox (*Vulpes macrotis mutica*), California vole (*Microtus californicus*), California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and American badger (*Taxidea taxus*). Common amphibian and reptile species associated with grasslands in the San Joaquin Valley include western toad (*Anaxyrus boreas*), western fence lizard (*Sceloporus occidentalis*), California kingsnake (*Lampropeltis californiae*), Pacific gopher snake (*Pituophis catenifer catenifer*), and northern Pacific rattlesnake (*Crotalus oreganus oreganus*).

The Study Area includes paved roads, rural residences, businesses, and landscaped areas (Appendix B, photos 6–8). While the developed/landscaped habitat does not harbor many species, several that are well adapted to frequent anthropogenic disturbances include avian species such as American Robin (*Turdus migratorius*), doves and pigeons, sparrows, and Killdeer (*Charadrius vociferus*); mammalian species such as California ground squirrel, deer mouse (*Peromyscus maniculatus*), desert cottontail (*Sylvilagus audubonii*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*); and herpetological species such as western fence lizard and northern alligator lizard (*Elgaria coerulea*).

The Project could interfere with the movement of wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The mitigation measures detailed below, which focus on certain animal species, will reduce this potential impact to a less than significant level.

#### **Giant Garter Snake Conservation Measures**

GGs1     Implement *Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake (Thamnophis gigas) Habitat*. (Appendix C).

#### **San Joaquin Kit Fox Conservation Measures**

SJKF1     Implement the *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or during Ground Disturbance* (Service 2011; Appendix F).

#### **Western Pond Turtle Conservation Measures**

- a.    WPT1    A qualified biologist shall be on call during all activities, including groundbreaking, earthmoving, and construction activities that could result in the mortality or injury of western pond turtles.
- b.    If at any time a pond turtle is discovered in the construction area by the on-call biologist or anyone else, the on-call biologist shall move the animal to a safe location in suitable aquatic habitat outside of the impact area. The biologist shall monitor translocated animals until safe from induced exposure to predators or other dangers.
- c.    Because pond turtles may take refuge within and under cavity-like and den-like structures, such as pipes, and may enter stored pipes and become trapped, all construction pipes, culverts, or similar structures that are stored

at a construction site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the on-call biologist and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a pond turtle is discovered inside or under a pipe by the on-call biologist or anyone else, the on-call biologist shall translocate the animal as previously described.

- d. To prevent inadvertent entrapment of pond turtles during construction, the on-call biologist and/or construction foreman/manager shall ensure that all excavated, steep-walled holes or trenches more than one-foot deep are completely covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the on-call biologist and/or construction foreman/manager. If at any time the on-call biologist or anyone else discovers a trapped turtle, the on-call biologist shall translocate the turtle as previously described.
- e. To eliminate an attraction for the predators of pond turtles, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the entire construction site.
- f. If a pond turtle or any turtle that construction personnel believe may be a pond turtle is encountered during project construction, the all work that could cause harm to the turtle shall be halted until the turtle moves, of its own volition, out of the work area and out of harm's way. Alternatively, the qualified biologist may relocate the turtle out of harm's way and into suitable aquatic habitat, as allowed by CDFW.
- g. The on-call biologist shall translocate the turtle as previously described.

#### ***Swainson's Hawk Conservation Measures***

SWHA1 Following the methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000 [Appendix D]), a qualified ornithologist shall conduct surveys during the Swainson's hawk breeding season (i.e., March through August) to determine the locations of active Swainson's hawk nests within a 10-mile radius of the project site. If a

potentially active Swainson's hawk nest is present, the biologist will recommend the following:

- A qualified biologist knowledgeable in the biology of the Swainson's hawk shall give a class on the general ecology of the species, covering these topics: current status, general description, breeding biology, habitat use, and what to do if species is encountered. Information cards will be passed out to work crew and crew is required to sign an attendance roster.
- If a Swainson's hawk nest is known to be within 0.25 mile of a planned activity, a qualified biologist will evaluate any potential effects of the activity. If the biologist determines that the activity would disrupt nesting, a 1000-foot buffer and limited operation period during the nesting season (March 15–June 30) will be implemented. Evaluations will be performed in consultation with the local CDFW representative.

SWHA2 Under CDFW mitigation guidelines, loss of suitable foraging habitat within 10 miles of a Swainson's hawk nest site should be mitigated by protecting or creating equally suitable foraging habitat elsewhere within the territory's 10-mile radius (CDFG 1994 [Appendix E]). The acreage of Habitat Management (HM) lands provided would be derived from the following recommendations included in the 1994 CDFG staff report:

- If the project is determined to be within one mile of an active nest tree, the project proponent shall provide one acre of HM land (at least 10 percent of the HM land requirements shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90 percent of the HM lands protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk) for each acre of development authorized (1:1 ratio); or
- One-half acre of HM land (all of the HM land requirements shall be met by fee title acquisition or a conservation easement (acceptable to CDFW) which allows for the active management of the habitat for prey production on the HM lands) for each acre of development authorized (0.5:1 ratio).
- If the project is determined to be within five miles of an active nest tree but greater than one mile from the nest tree, the project proponent shall

provide 0.75 acre of HM land for each acre of urban development authorized (0.75:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to CDFW) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawks.

- If the project is determined to be within 10 miles of an active nest tree but greater than one mile from the nest tree, the project proponent shall provide 0.5 acre of HM land for each acre of urban development authorized (0.5:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to the CDFG) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawks.
- Management Authorization holders/project sponsors shall provide for the long-term management of the HM lands by funding a management endowment (the interest on which shall be used for managing the HM lands).

### ***Special-Status Bat Species Conservation Measures***

SSBS1 Potential roosting areas on the existing water tank or medium or larger ( $\geq 12$ -inch diameter) trees or snags that are selected for trimming or removal will be inspected by a qualified wildlife biologist for presence of potential dens (cavities, entrance holes) suitable for pallid bat or western mastiff bat. Cavities suitable as special-status bat roosts will be examined for roosting bats using a portable camera probe or similar technology. If present, special-status bat roosts (including day and night roosts, hibernacula, and maternity colonies) will be flagged, and construction activities will be avoided within a minimum of 300 feet surrounding each occupied roost.

If the site is being used as a winter roost, the action will not take place during the period of hibernation (November 1 to March 1). If the site is being used as a maternity colony, the action will not occur during the maternity roost season (April 1 to August 31). If a non-maternity bat roost is found within the Project Area, the roosting bats will be safely evicted under the direction of a qualified biologist (as determined by a Memorandum of

Understanding with CDFW). The qualified biologist will facilitate the removal of roosting bats by:

- Opening the roosting area to allow airflow through the cavity or building (air flow disturbance).
- Waiting a minimum of one night for roosting bats to respond to air flow disturbance, thereby allowing bats to leave during nighttime hours when predation risk is relatively low and chances of finding a new roost is greater than in the daytime.
- Disturbing roosts at dusk just prior to roost removal the same evening to allow bats to escape during nighttime hours.

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

☐ ☐ ☐ ☒

**Discussion:** There are no local policies or ordinances in Firebaugh protecting biological resources other than policies contained in its General Plan. These policies pertain to the protection of waterways and their adjacent lands for potential riparian woodlands and pedestrian walkways.

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

☐ ☐ ☐ ☒

**Discussion:** There are no adopted habitat conservation plans that apply to the project site.

## **V. CULTURAL RESOURCES --**

Would the project:

1. Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?

☐ ☐ ☒ ☐

**Discussion:** A records search through the California State Bakersfield Regional Information Center was ordered when Firebaugh completed an update to its General Plan in 2010. The records search indicated only one known archaeological site in the Firebaugh planning area. It was reported during the construction of the Delta-Mendota canal in 1951. The site contained human bone from at least two individuals, a large obsidian "point" and other artifact fragments. The site is now under water.

In 2008, the City of Firebaugh contracted with LSA Associates to conduct a Cultural and Paleontological Resources Study on a site adjacent to the San Joaquin River approximately 1/2 mile from the proposed tank site. A records search (SSJVIC: RS #08-116) of the project area was conducted on May 29, 2008, at the SSJVIC of the California Historical Resources Information System, California State University, Bakersfield. The SSJVIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of cultural resource records and reports for Fresno County. As part of the records search, LSA reviewed the following State of California inventories for cultural resources in and adjacent to the project area:

- *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976);
- *Five Views: An Ethnic Site Survey for California* (California Office of Historic Preservation 1988);
- *California Historical Landmarks* (California Office of Historic Preservation 1996);
- *California Points of Historical Interest* (California Office of Historic Preservation 1992); and
- *Directory of Properties in the Historic Property Data File* (California Office of Historic Preservation, March 9, 2008).

GANDA has followed up with additional cultural studies that focus of the project area - both the HUD Tank area as well as the pipeline alignment. The Study indicated that none of the proposed improvements will cause an adverse change to a historical resource as defined by CEQA Guidelines Section 15064.5 (b). A less than significant impact on historical resources will not require any mitigation measures. GANDA's findings are as follows:

The cultural resources records search, archival and map review, and consultation with Native American groups and historical societies resulted in a finding that no historic properties will be affected by the proposed undertaking. The pedestrian field survey was conducted within the Area of Potential Effects on July 31, 2018 and no cultural resources were identified. Results of the historic archival and map research and the buried prehistoric site sensitivity assessment demonstrate that there is a moderate potential for encountering archaeological deposits within the Area of Potential Effects.



2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?

☐ ☐ ☒ ☐

**Discussion:** Record searches through the California State Bakersfield Regional Information Center have indicated that it is unlikely that any cultural resources exist on or near the HUD Tank site and the pipeline alignment.

None of the proposed improvements will cause an adverse change to an archaeological resource as defined by CEQA Guidelines Section 15064.5 (b). A less than significant impact on archaeological resources will not require any type of mitigation measures.

3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

☐ ☐ ☒ ☐

**Discussion:** Excavation on the Valley floor has yielded paleontological finds, however, to predict these finds is very difficult. If any cultural or paleontological materials are uncovered during project activities, work in the area shall halt until a professional cultural resources evaluation and/or data recovery excavation can be planned and implemented.

4. Disturb any human remains, including those interred outside of formal cemeteries?

☐ ☐ ☒ ☐

**Discussion:** Due to past disturbance of the HUD Tank yard's soils (grading of site and clearing of vegetation) it is unlikely that any human remains exist at the sites. However, should any human remains be discovered during grading and construction, the Fresno County Coroner must be notified immediately. *(The Coroner has two working days to examine the remains and 24 hours to notify the Native American Heritage Commission [NAHC] if the remains are Native American. The most likely descendants then have 24 hours to recommend proper treatment or disposition of the remains, following the NAHC guidelines).*



**VI. GEOLOGY AND SOILS** -- Would the project:

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

☐ ☐ ☒ ☐

**Discussion:** While Firebaugh is located in an area that is subject to ground shaking from earthquakes, the distance to active faults that will be the likely cause of ground motions is sufficient so that potential impacts are reduced. The project sites are not located within an identified Alquist-Priolo Earthquake Hazard Zone. Therefore, impacts are considered less than significant. Although no mitigation measures are required, Firebaugh requires all new structures in the city to be built consistent with Zone II seismic standards of the Uniform Building Code.

2. Strong seismic ground shaking?

☐ ☐ ☒ ☐

**Discussion:** The subject site is not located on an earthquake fault and the geologic conditions on the Valley floor have a low hazard risk from earthquakes. These conditions indicate a less than significant impact on the project due to ground shaking. No mitigation measures are required.

3. Seismic-related ground failure, including liquefaction?

☐ ☐ ☒ ☐

**Discussion:** The subject site is not located on an earthquake fault and the geologic conditions on the Valley floor have a low hazard risk from earthquakes- seismic activity.

These conditions indicate a less than significant impact on the project site due to ground shaking. No mitigation measures are required.

4. Landslides?

☐ ☐ ☒ ☐

**Discussion:** The project site is on level ground and therefore is not subject to landslides.

5. Result in substantial soil erosion or the loss of topsoil?

☐ ☐ ☒ ☐

**Discussion:** The HUD Tank site and pipeline will be located on level ground and on soils that are not considered erosive.

6. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

☐ ☐ ☐ ☒

**Discussion:** The HUD Tank site and pipeline will rest on a soil that is composed Tranquillity-Tranquillity soil type. This soil has a saline-sodic condition. The soil is on level ground and exhibits a slow permeability. The soil is not considered to be unstable and does not present construction problems for the construction of the proposed tank or water lines.

7. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

☐ ☐ ☐ ☒

**Discussion:** The Tranquillity-Tranquillity soil type is composed of fluvaquents and xenofluvents. These soils are located along floodplain channels and are very deep and poorly drained. They are formed by alluvium derived from sedimentary rock. They do

not contain clays, which are typically considered to be expansive, thereby causing problems for structures, roadways and foundations. There will be no impact.

8. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

☐ ☐ ☐ ☒

**Discussion:** No septic systems will be utilized as part of the project.

**VII. GREENHOUSE GAS EMISSIONS:** Would the project:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

☐ ☐ ☒ ☐

**Discussion:** Greenhouse gas emissions (GHG) are emissions of various types of gases that are believed to be causing an increase in global temperatures, which is affecting the world's climate patterns. Scientists recognize GHG resulting from human activities, particularly the use of machinery that burns fossil fuels for power. Key greenhouse gases include carbon dioxide, methane, nitrous oxide, and hydro fluorocarbons.

Greenhouse gas emissions will occur during the construction phase and the operation phase of the project. The construction phase will entail replacing the HUD Tank, pump and installing new pipelines from the HUD Tank to the Delta-Mendota Canal.

Emissions (short-term emissions) from the construction phase of the project are not expected to have a significant impact on the environment. During the construction phase CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O will be emitted, which are emissions that result from the combustion of fuel utilized by construction equipment and motor vehicles.

Completion of the project is estimated to be 120 days. The emissions that would be generated during the construction phase of the project are deemed less than significant because it would only involve several vehicles and a trenching rig. The greenhouse gas emissions generated by these vehicles and power equipment associated with these tasks are insignificant when compared the number of vehicles and stationary sources operating within the Firebaugh city limits, let alone the State of California's greenhouse gas

emissions, which are estimated to be 483.87 million metric tons per year. No mitigation measures are required for this phase of the project.

The operational phase of the project, which involves the pumping of water from the HUD Tank to the new water line, will generate little indirect greenhouse gas emissions because the pump will use electricity rather than fossil fuels. The pump will use approximately 25 kWh per day, which is about the same energy usage as a single-family home in Firebaugh during the summer months. Given that there are about 2,000 residential units in Firebaugh, the operation of this pump is insignificant compared to the amount of greenhouse gases produced by households in the community. This impact is deemed insignificant and therefore does not require mitigation measures.

2. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

☐ ☐ ☒ ☐

**Discussion:** A less than significant impact is expected. The project proposes to use an energy-efficient electric motor to pump water from the HUD Tank to the new water line. The use of a more energy-efficient pump will reduce greenhouse gas emissions, which is consistent with the requirements of Assembly Bill 32 (California Greenhouse Gas Solutions Act).

### **VIII. HAZARDS AND HAZARDOUS**

**MATERIALS:** Would the project:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

☐ ☐ ☐ ☒

**Discussion:** The project will not involve the transport, use or disposal of hazardous materials, nor is the project located adjacent to transportation corridors that would be used to move such materials.

2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

☐ ☐ ☐ ☒

**Discussion:** The project involves the pumping of water from a city water line into the HUD Tank and then back into a water line that will feed properties west and south of the HUD Tank site. Hazardous materials will not be released during this process.

3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

☐ ☐ ☐ ☒

**Discussion:** The project will not emit hazardous emissions or require the handling of hazardous or acutely hazardous materials, substances, or waste. The project involves the pumping of water from a city water line into the HUD Tank and then back into a water line that will feed properties west and south of the HUD Tank site.

3. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

☐ ☐ ☐ ☒

**Discussion:** The project sites are not included on any list of known hazardous materials sites compiled pursuant to Government Code Section 65962.5 nor are there any sites within 1/2 mile of the project sites.

4. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

☐ ☐ ☒ ☐

**Discussion:** The project site is within one mile of the Firebaugh Airport. The HUD Tank site is .75 miles off the end of the airport runway, however, only light planes use the airport and after 3/4 of a mile a plane's elevation is well above the tank site.

5. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

☐ ☐ ☐ ☒

**Discussion:** The project site is within one mile of the Firebaugh Airport. The HUD Tank site is .75 miles off the end of the airport runway, however, only light planes use the airport and after 3/4 of a mile a plane's elevation is well above the tank site.

5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

☐ ☐ ☐ ☒

**Discussion:** The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan adopted by Fresno County. The HUD Tank and associated pipeline are not located along major evacuation roadways.

6. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

☐ ☐ ☒ ☐

**Discussion:** There are no wildlands on or near the HUD Tank site, or pipeline route.

## **IX. HYDROLOGY AND WATER QUALITY** -- Would the project:

1. Violate any water quality standards or waste discharge requirements?

☐ ☐ ☒ ☐

**Discussion:** Firebaugh's new HUD Tank and associated improvements (pump, water lines, etc.) will be required to be designed to ensure that water stored and distributed by these improvements complies with the State of California's Safe Drinking Water Standards. There will be a small amount of impervious surfaces created with the construction of the new tank and associated improvements, however, these impervious

surfaces area will not lead to any substantial runoff that would cause downstream flooding or erosion. The runoff would most likely percolate into the native ground that surrounds the new tank site.

2. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

☐ ☐ ☒ ☐

**Discussion:** The drainage pattern on and around the tank site will not be altered. Other than the tank site footprint (which will measure 75 feet in diameter) the surrounding area will remain undisturbed. There will be a small amount of impervious surfaces created with the construction of the new tank and pump, however, this area will not lead to any substantial runoff that would cause downstream flooding or erosion. The runoff would most likely percolate into the native ground that surrounds the new well site. It will not be diverted to the city's storm drainage system.

Runoff generated from the tank site will not contain any contaminants.

3. Otherwise substantially degrade water quality?

☐ ☐ ☒ ☐

**Discussion:** The proposed project will not adversely impact the community's water quality. The purpose of the HUD Tank and associated improvements (pump, water lines, etc.) is to transport the city's drinkable water to users located along the proposed water line alignment.

3. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

☐ ☐ ☒ ☐

**Discussion:** No housing is proposed with the project.

4. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

☐ ☐ ☒ ☐

**Discussion:** The HUD Tank site is not located in a 100-year flood hazard area. No mitigation measures are necessary.

5. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

☐ ☐ ☒ ☐

**Discussion:** The project will not expose people or structures to risk of loss resulting from flooding or overtopping of the San Joaquin River. The site is not within the 100-year floodplain.

6. Inundation by seiche, tsunami, or mudflow?

☐ ☐ ☐ ☒

**Discussion:** The project is located about 100 miles inland from the Pacific Ocean, the closest source of a seiche or tsunami. There are no aspects of the project that reasonably present the danger of a mudflow.

## **X. LAND USE AND PLANNING -**

Would the project:

1. Physically divide an established community?

☐ ☐ ☐ ☒

**Discussion:** The upgrading of the HUD Tank site will not physically divide the community. Generally, physical features that divide a community include freeways, railroads, and major roadways - not buried water pipelines or utility yards.

2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to



the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

☐ ☐ ☒ ☐

**Discussion:** The HUD Tank yard is zoned "M-1" (light industrial) according to the official zoning map of the City of Firebaugh. Water tanks and associated improvements are permitted uses in this zone district and therefore this portion of the project is consistent with Firebaugh's zoning ordinance.

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3. Conflict with any applicable habitat conservation plan or natural community conservation plan?

☐ ☐ ☐ ☒

**Discussion:** The project site is not subject to any habitat or natural community conservation plans.

## **XI. MINERAL RESOURCES** --

Would the project:

1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

☐ ☐ ☐ ☒

**Discussion:** The site is not known to harbor mineral resources that would be valuable to the region. Areas along rivers are valuable as sites for sand and gravel operations; the project site is 1/2 mile from the San Joaquin environs.

2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

☐ ☐ ☐ ☒

**Discussion:** Neither Firebaugh nor Fresno County's general plans identify the project site as a location where important mineral recovery sites exist. The project will not have a significant impact on this resource. No mitigation measures are required.

**XII. NOISE** -- Would the project result in:

1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

☐ ☐ ☒ ☐

**Discussion:** The installation of the HUD Tank will not increase ambient noise levels in the project vicinity. In the short term the ambient noise level will be raised during the construction of the project by the operation of equipment and other associated activities. Because construction noise will generally occur intermittently on Monday through Saturday during daylight hours, the impact of noise on surrounding areas is not expected to be significant. During the evening hours, when work has ceased on the project, it is unlikely that noise levels on nearby properties will exceed 65 dBA outside each building or 45 dBA inside each building. Short-term noise impacts are considered less than significant and no short-term noise mitigation measures are required.

The long-term operation of the HUD tank relies on electrical energy, not gasoline or diesel engines. Operation of the electric motor does not generate noise levels that would cause adverse impacts on adjacent land uses, which only include industrial uses.

2. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

☐ ☐ ☒ ☐

**Discussion:** The project does not involve the use of equipment that would generate ground-borne vibrations or the utilization of heavy trucks or other types of equipment that might generate excessive vibrations. The trenching rig will generate some ground borne noise but not to a decibel level that would adversely impact local residences.

2. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

☐ ☐ ☒ ☐

**Discussion:** The project will not increase long-term ambient noise levels within the vicinity of the project. The tank pump uses electrical energy to pump water from the tank into the water lines.

3. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

☐ ☐ ☒ ☐

**Discussion:** Construction activities associated with the project may result in temporary noise increases in the ambient environment. As discussed above, construction will be limited to daylight hours Monday through Saturday. Also mentioned above, the tank pump uses electricity for power. This source of energy generates little noise. The project will not have a significant impact on ambient noise levels in the vicinity of the project; mitigation measures will not be required.

4. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

☐ ☐ ☒ ☐

**Discussion:** The project is not a noise-sensitive use and therefore will not be impacted by noise from this type of land use. No mitigation measures are required.

5. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

☐ ☐ ☐ ☒

**Discussion:** The project site is located within one mile of the Firebaugh airstrip but because the project site does not contain residences, there will be no exposure of people to airport related noise.

### **XIII. POPULATION AND HOUSING**

-- Would the project:

1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

☐                      ☐                      ☒                      ☐

**Discussion:** The project will upgrade the water (quality and pressure) being provided to the unincorporated community of Las Deltas.

The project will have a less than significant impact on the community's population growth, given that the amount of water that will be pumped to the project area will be similar to what is currently being provided, however, the water quality will be improved, as will the pressure. No mitigation measures are required.

2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

☐                      ☐                      ☐                      ☒

**Discussion:** Existing residential units existing in the project area will not be replaced.

3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

☐                      ☐                      ☐                      ☒

**Discussion:** No existing dwellings will be removed as a result of the project.

### **XIV. PUBLIC SERVICES**

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which

could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

☐ ☐ ☒ ☐

**Discussion:** The project area receives fire protection services from the Firebaugh Fire Department. The Department is headquartered in downtown Firebaugh. The project will enhance the pressure in the water lines, thereby improving fire suppression in the project area. No mitigation measures are required.

Police protection?

☐ ☐ ☒ ☐

**Discussion:** The project site receives police protection from the Firebaugh Police Department, headquartered in central Firebaugh. The project will have a less than significant impact on police protection services in Firebaugh. No mitigation measures are required.

Schools?

☐ ☐ ☐ ☒

**Discussion:** The project will have a less than significant impact on schools in Firebaugh as no residences are proposed that would result in increased school attendance. No mitigation measures are required.

Parks?

☐ ☐ ☒ ☐

**Discussion:** The project will not have a significant impact on parks in the community because the project does not generate any residents that would use park facilities. No mitigation measures are required.

Other public facilities?

☐ ☐ ☐ ☒

**Discussion:** The project will not adversely impact other public facilities in the community. The project enhances an existing water distribution system by improving the

water quality that is transported from the HUD Tank to the water line that will eventually serve the community of Las Deltas. Further, the water pressure in the water line will be enhanced with a booster pump located in the HUD Tank yard.

## **XV. RECREATION --**

1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

☐ ☐ ☐ ☒

**Discussion:** The project does not affect recreational facilities. The project will have a less than significant impact on recreation facilities and mitigation measures are not required.

2. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

☐ ☐ ☒ ☐

**Discussion:** The project does not include any recreational facilities and therefore will have a less than significant impact on the environment.

## **XV. TRANSPORTATION/TRAFFIC**

-- Would the project:

1. Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

☐ ☐ ☒ ☐

**Discussion:** The project will generate a small volume of traffic during the construction phase of the project. There will be a slight increase in traffic on local roadways as vehicles associated with the construction process (e.g. tank construction, installation of pumps and trenching of new water lines) will utilize local roadways, however, this traffic will be minimal.

The project will not have an adverse impact on Firebaugh's circulation system. Only minimal volumes of vehicular traffic will be generated by the project. No mitigation measures are required.

1. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

☐ ☐ ☒ ☐

**Discussion:** Traffic generated by the project is not expected to conflict with Fresno County's Congestion Management Programs. The volume of traffic that will be generated by the project will be negligible. The roadways that serve the HUD Tank site and pipeline route will not be adversely impacted with the project's traffic because they are operating at a Level of Service of A or better. No mitigation measures are required.

2. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

☐ ☐ ☒ ☐

**Discussion:** The project will not affect air traffic patterns.

3. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

☐ ☐ ☐ ☒

**Discussion:** The project is not anticipated to increase hazards due to any roadway design feature or incompatible uses that would use adjacent roadways. The project does not involve any modifications to a road nor will it utilize any equipment that would be incompatible with the operation of adjacent roadways. The heavy equipment that will be used to install the HUD Tank, pumps and ditch trenchers can be driven on local roadways and state highways. No significant impacts are expected in this category and mitigation measures are not required.

4. Result in inadequate emergency access?

☐ ☐ ☐ ☒

**Discussion:** The project does not propose any improvements that would restrict emergency access to the site. No significant impacts are expected in this category. Mitigation measures are not required.

5. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

☐ ☐ ☐ ☒

**Discussion:** The project will not conflict with any policies, plans, or programs supporting alternative modes of transportation.

## **XVII. UTILITIES AND SERVICE SYSTEMS:** Would the project:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

☐ ☐ ☒ ☐

**Discussion:** The project will not generate any wastewater and therefore will not have an adverse impact on wastewater or water quality standards. Mitigation measures are not required.



2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

☐ ☐ ☒ ☐

**Discussion:** The project involves the installation of a new above-ground water tank, a booster pump and new water lines. This project will have a positive impact on this portion of Firebaugh's water system by enhancing pressure in to-be-installed water lines and enhancing the water quality that is transported to the Las Deltas community. No mitigation measures are required.

3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

☐ ☐ ☐ ☒

**Discussion:** The project does not involve the construction of storm drainage improvements and therefore will not cause any environmental effects potentially caused by the installation of these improvements.

4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

☐ ☐ ☒ ☐

**Discussion:** The project will ensure that the community of Las Deltas has an adequate supply of water that meets State drinking water standards and has adequate pressure. The project will have a positive impact on Firebaugh's water system as well as the community of Las Deltas.

5. Result in a determination by the wastewater treatment provider that serves or may serve the project that it

has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

☐ ☐ ☒ ☐

**Discussion:** The project will not lead to an increase in the demand for more treatment capacity at the wastewater treatment plant because the project does not involve land uses that generate sewage. The project will not have a significant impact on this public service. No mitigation measures are warranted.

6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

☐ ☐ ☒ ☐

**Discussion:** The project will not generate any solid waste and therefore will not have any impact on local landfills. The project only involves the pumping of water from the HUD Tank into a water line that will extend towards the Las Deltas community.

7. Comply with federal, state, and local statutes and regulations related to solid waste?

☐ ☐ ☐ ☒

**Discussion:** The project will not generate any solid waste material and therefore will not violate any federal, state or local statutes or regulations related to solid waste.

## 5.0 ALTERNATIVES

One alternative solution were explored for the project. It was:

Develop a new well adjacent to the existing Las Deltas water lines and pump water into this pipeline system, which must meet the State's Safe Drinking Water Standards. This alternative was rejected because the existing water lines are old and currently have leaks. Also, this alternative may be not feasible if the well does not pull enough water to meet the needs of the Las Deltas community or the water quality is "poor" thereby not meeting the State's Safe Drinking Water Standards.

**6.0. MANDATORY FINDINGS OF SIGNIFICANCE**

1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

☐ ☐ ☒ ☐

2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

☐ ☐ ☒ ☐

3. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

☐ ☐ ☒ ☐

**CHECKLIST PREPARED BY:**

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Name

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Date